

SEMICONDUCTOR DEVICE

ABSTRACT OF THE DISCLOSURE

5 A semiconductor device having a photo diode which
has substantially the same sensitivity to a plurality of
light having different wavelengths, comprising a first
conductivity type semiconductor layer and a second
conductivity type semiconductor layer formed at a surface
10 layer portion of said first conductivity type
semiconductor layer, wherein the sensitivity to light of
a first wavelength and the sensitivity to light of a
second wavelength which is different from said first
wavelength are made substantially the same by designing a
15 region in which a depletion layer spreads from a junction
of said first conductivity type semiconductor layer and
said second conductivity type semiconductor layer when an
inverse bias is applied to said first conductivity type
semiconductor layer and said second conductivity type
20 semiconductor layer, for example, by designing it to
spread in a region of 3 to 6 μm or a region of 2 to 7 μm
from the surface of the second conductivity type
semiconductor layer in the depth direction.

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